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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,868	01/03/2001	Eiichi Nagasaka	P4970b	7093

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EXAMINER

GOODWIN, JEANNE M

ART UNIT	PAPER NUMBER
2841	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/674,868

Applicant(s)

NAGASAKA ET AL.

Examiner

Jeanne-Marguerite Goodwin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-56 is/are pending in the application.
- 4a) Of the above claim(s) 26-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group II in the reply filed on Feb. 3, 2005 is acknowledged. The traversal is on the ground(s) that an office action has already been issued. This is not found persuasive because Group I and Group II are distinct invention because the correctness of the restriction is determined by the distinctness and the burden. Distinctness is (1) the combination as claimed does not require the particulars of the subcombination as claim for patentability, and (2) that the subcombination has utility by itself or in other combinations, which is met in this case. And the burden is shown by the different classification, which is met in this case.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 46-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite and the scope of the claim is unclear.

Claim recites the structure of a starting member that couples to an engaging portion. But the claim then states that the rotating force (which is not even positively claimed) if and when it is temporarily applied creates a response by the member that the member does not substantially vary. So, the only structure that the claim sets forth is the starting member coupled to an engaging portion. And the rest of the language expresses capabilities of this member. The prior

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art, Schmidt, has not only this structure, but also teaches the functionality and capabilities of mechanically engaging with an engaged portion of a rotation target gear of the mechanically energy source, wherein the engaged portion is moved in response to operation of an external operating member. Schmidt does not discuss that the member not vary substantially and applicant argues that the Schmidt does not disclose the invention for this reason. As the structure of the claim is completely disclosed by Schmidt, it is presumed that Schmidt must have all the same capabilities of the invention. Since applicant argues that it doesn't, the scope of the claim is rendered indefinite, because there must be some structure recited in the claims 46, 47 and 50 which distinguishes between Schmidt and the claims and the Examiner is not sure what this is because Schmidt has all the same structure.

Claims 48 and 49 are rejected to as being dependent upon a rejected claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 46, 48, 49 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 3,579,974 to Schmidt [hereinafter Schmidt] in view of US Patent 6,483,276 to Shimizu.

Schmidt discloses an electronically-controlled drive mechanism for clocks having a startup member comprising a rotor wheel/rotation target gear (7) having a driving pinion (9) comprising tongues/engaged portion (8) which are magnetically excited via oscillating coil

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having a yoke (16), wherein the start of the driving system is accomplished such that a free end of a fixed starter spring/engaging portion (23) is connected to the first translating gear (24) or on the second translating gear and meshes or engages in any desired cog of the gear (24), upon the disengagement of a corresponding lever (25), causes the gear (24) and therewith the rotor wheel (7) to assume a suitable speed of rotation and two driving oscillator coils/external operating member (5/6) which apply a rotating force to the rotor wheel/rotation target gear (7), while the starter spring/engaging portion (23) is in engagement with the tongues/engaged portion (8), . Furthermore, the starting spring may, of course, also be connected directly to the rotor wheel (7). The automatic start of the rotor wheel (7) may be effected, for example, by means of a slowly increasing switching frequency up to the theoretical frequency, and by subsequently continuing the further operation with the aid of the generator. Moreover, the starter spring/engaging portion (23) is moved substantially in a tangential direction relative to a peripheral portion of the rotor wheel/rotation target gear (7). Schmidt discloses all the subject matter claimed by applicant with the exception of the limitations stated in claims 46 and 50, i.e., the rotation controller and the hands driven under control of the rotation controller.

With respect to the limitations stated in claims 46 and 50: Furthermore, Shimizu discloses a rotational controller driven by the electric energy so as to control rotation period of the electric power generator so that the clock hands connected to a wheel train are precisely driven to indicate precise time. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add the rotational controller/hand assembly, as taught by Shimizu, to the generator of Schmidt, in order to control the rotation

period of the electric power generator so that the clock hands connected to a wheel train are precisely driven to indicate precise time as already suggested by Shimizu.

6. Claim 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Shimizu and US Patent 4,939,707 to Nagao.

Schmidt discloses a device as stated above with regards to claim 46. Schmidt disclose all the subject matter claimed by applicant with the exception of the limitations stated in claim 47, i.e., a transmission wheel train, hands being driven by the transmission wheel train and an accumulator.

With respect to the limitations stated in claim 47, i.e., a transmission wheel train and hands being driven by the transmission wheel train : More specifically, Shimizu teaches using an electric power generator, driven by the mechanical energy source connected to the electric power generator via an energy transmission device such as a wheel train, for generating electric power by means of induction and supplying resulting electrical energy, wherein the hands are connected to the energy transmission device so as to indicate time. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to add transmission device, as taught Shimizu, to the generator of Schmidt, in order for the mechanical energy source to be converted to electric power as already suggested by Shimizu.

With respect to the limitations stated in claim 47, i.e., an accumulator: Nagao discloses an electronic wristwatch with an electric generator using an accumulator charging capacitor (45) in order of assuring the continuous operation of the watch should the primary source be rendered inactive. Therefore, it would have been obvious to a person having ordinary skill in the art at the

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time the invention was made to add accumulator, as taught by Nagao, to the generator of Schmidt, in order to assure the continuous operation of the watch should the primary source be rendered inactive.

Inventorship

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Allowable Subject Matter

8. Claims 54-56 allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The reference to the combination of Schmidt, Shimizu and Nagao shows a timepiece having a mechanical energy source, an electric power generator driven by the mechanical energy source for outputting electrical energy; a rotation controller operated with the electrical energy generated by the electric power generator, hands driven under control of the rotation controller; and a starter for the electric power generator, wherein the starter comprises a startup member having an engaging portion capable of mechanically engaging with an engaged portion of a

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rotation target gear of the mechanically energy source, wherein the engaging portion is moved in response to operation of an external operating member to apply a rotating force to the rotation target gear, while the engaging portion is in engagement with the engaged portion. Applicant's claimed invention discloses in greater detail the starter comprising a startup spring having an engaging portion capable of mechanically engaging with an engaged portion of a rotation target gear of the transmission wheel train, and a startup-spring operating member comprising a latch portion capable of engaging with the rotation target gear to stop rotation thereof and a startup-spring biasing portion for biasing the startup spring by a predetermined amount, wherein the startup-spring operating member is adapted to bias the startup spring so as to engage the engaging portion thereof with the engaged portion of the rotation target gear and to cause the latch portion to engage with the rotation target gear, in response to a first operation of the external operating member, to temporarily apply a rotating force to the rotation target gear, while the engaging portion is in engagement with the engaged portion and the latch portion is in engagement with the rotation target gear, whereby the rotor is rotated at an increased speed upon startup of the electric power generator, and release the startup spring from a biased state to return the startup spring to an original position in response to a second operation of the external operating member. Furthermore, the timepiece of the combination of Schmidt, Shimizu and Nagao does not have the bias spring/latch assembly, respectively, and there seems to be no motivation to modify the device shown in the combination Schmidt, Shimizu and Nagao to accommodate the bias spring/latch assembly.

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Claims 55 has been found to be allowable as being dependent upon the allowable claim 54.

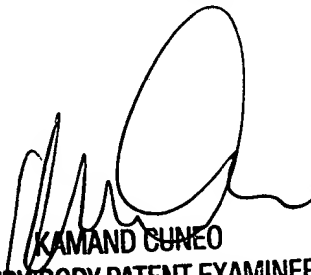
Response to Arguments

9. Applicant's arguments filed June 2, 2004, page 13, lines 12-28, with respect to claims 46-50 have been fully considered but they are not persuasive. The combination of Schmidt, Shimizu and Nagao discloses "corresponding structure" to achieve the stated functionality. All of the elements of the claims are met by the prior art (see explanation above). Examiner would also print out the claim says "substantially" applicant doesn't define this. Examiner assures that the member of Schmidt falls in the range of "substantially" regardless.

Conclusion

10. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Jeanne-Marguerite Goodwin whose telephone number is (571) 272-2104. The examiner can normally be reached on Monday-Friday (9am-6pm), alternate Fridays off. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2861.

JMG
June 23, 2005


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